

Trey Cluff

Washington, DC • [linkedin.com/in/thomas-cluff](https://www.linkedin.com/in/thomas-cluff) • <https://navinate.com>

Creative Technologist

I am a web developer and computational artist with a master's degree in computational art from Purdue University. I have vast experiences coding front-end applications using Svelte, TypeScript, and Python, as well as creating immersive virtual prototypes using Unity and C#. My core competencies include web programming and design, natural language processing, and user experience design.

WORK EXPERIENCE

Purdue Polytechnic Institute West Lafayette, Indiana, United States • On-site • 08/2023 - 12/2023 **Graduate Research Assistant**

- Front end developer for a research team working on a custom natural language interface for the Fathomnet database.
- Research was done in partnership for MBARI and involved developing user-friendly design patterns to interact with a custom LLM backend.
- I used SvelteKit with Typescript to develop a chat-based interface for users to interact with the database.
- The app used event streams to feed data from the Langchain, GPT-3.5 turbo, Django backend to the svelte front end.

Iron Mountain **3D Innovation Developer**

Remote • 05/2023 - 08/2023

- Interned within Iron Mountain's Innovation department, contributing to the development of a virtual prototype for an immersive museum experience using Unity and user-centered design tools.
- Responsible for prototyping user journey maps, conceptualizing user personas, and implementing C# Unity scripting for virtual exhibits.
- Constructed the virtual museum environment and user interface (UI) from sketching to Unity, ensuring seamless integration with the project's objectives.

Purdue Polytechnic Institute **Graduate Teaching Assistant**

West Lafayette, Indiana, United States • 07/2022 - 05/2023

- Lab instructor for CGT 141 at Purdue. The class covers HTML and CSS and the fundamentals of how the internet functions.
- Students are also introduced to JavaScript, WordPress, and various other web technologies.
- As the lab instructor, I was responsible for teaching students in lab sections (up to 180 students a semester), grading assignments, and assisting students with work during lab and office hours.

Títeres en Pantalla

Remote • 05/2021 - 09/2021

Títeres en Pantalla is a research group within the University of Antioquia. They focus on the intersection between art, technology, and education.

Educational Game Developer • Internship

- Optimized creative best practices and stakeholder goals by delivering interactive animations, improving efficiencies and elevating the student's educational experience.
- Prototyped and developed an educational web experience to teach students about the constellations
- Integrated a custom PHP scripting within the existing WordPress website to store and display student designed constellations within the web app.
- Designed and implemented animations within the web-app that give the illusion of 3D objects while being efficient with 2D assets

PROJECTS

StairWELL

03/2021 - 10/2023

Purdue Convocations

StairWELL was a multidisciplinary interactive art sculpture focusing on the connection between art, technology, and wellness. With support from Purdue's mental health professionals, StairWELL invited students to check in with their mental health. My graduate thesis at Purdue was the interaction system for the sculpture. It allowed a plethora of students to interact with the sculpture, the storage of their responses and input, and the display of their work on the larger screens. I worked with the greater StairWELL team to exceed stakeholder goals for visual design, storytelling, and dynamic audio feedback. Work for the StairWELL project was done with flexible workflows, rapid prototyping, and collaborative design.

EDUCATION

Master of Science - MS in Computational Art

Purdue University

08/2021 - 12/2023

Skills: C#, Unity, Unreal Engine. AR/VR, Project Management, User Interface Design, Visual Effects, Data Visualization, Machine Learning.

Bachelor's degree in Web Programming and Design

Purdue University

08/2019 - 05/2022

Skills: HTML, CSS, JS, C++, PHP, ASP.NET, WordPress, Drupal, Git, Linux, Figma

SKILLS

Adobe Photoshop, Arduino, AR/VR, ASP.NET, Blender, C#, Cascading Style Sheets (CSS), Creative Problem Solving, CSS, Elm, Figma (Software), Graduate Level, Houdini, HTML, HTML5, Java, JavaScript, Leadership, Linux, Markdown, Maya, Model View Application Architecture, MySQL, Open AI, PHP, Processing, Project Management, Public Speaking, Python (Programming Language), SQL, Svelte, TypeScript, Unity, User-centered Design, User Interface Design, Web Design, Web Development, Working With Children